U.S. Army Safety Center

U.S. ARMY SAFETY CENTER

Enhancing Combat Readiness through RISK MANAGEMENT

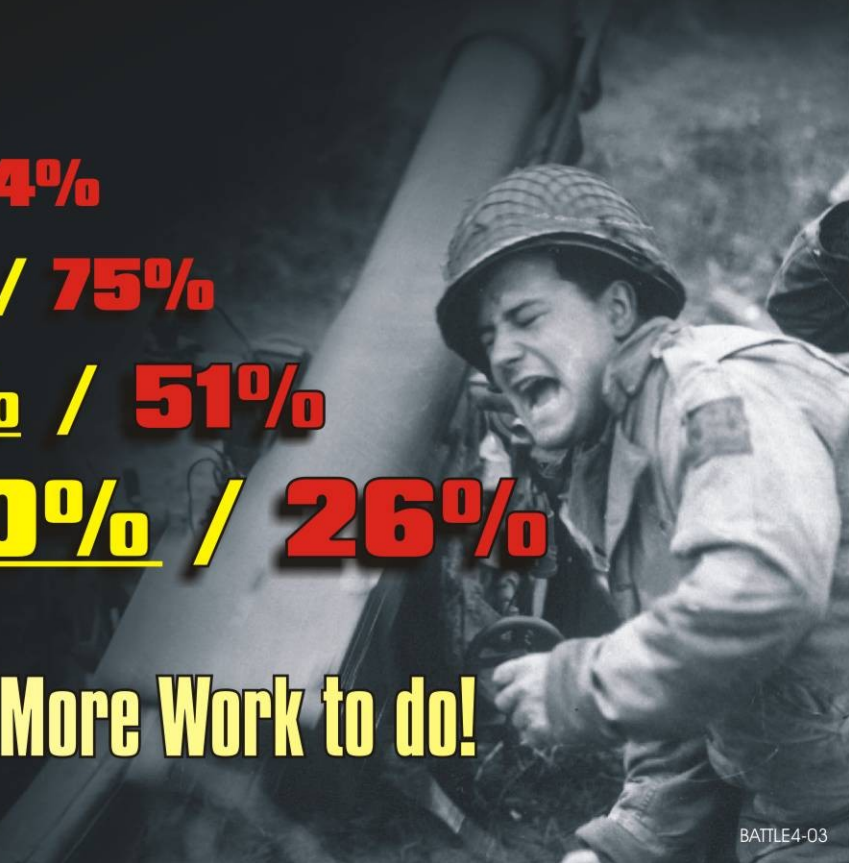
COL Mike Powell

Briefing to Executive Safety Board
US Marine Corps

Combat versus Accidents

Combat Losses / Accidents

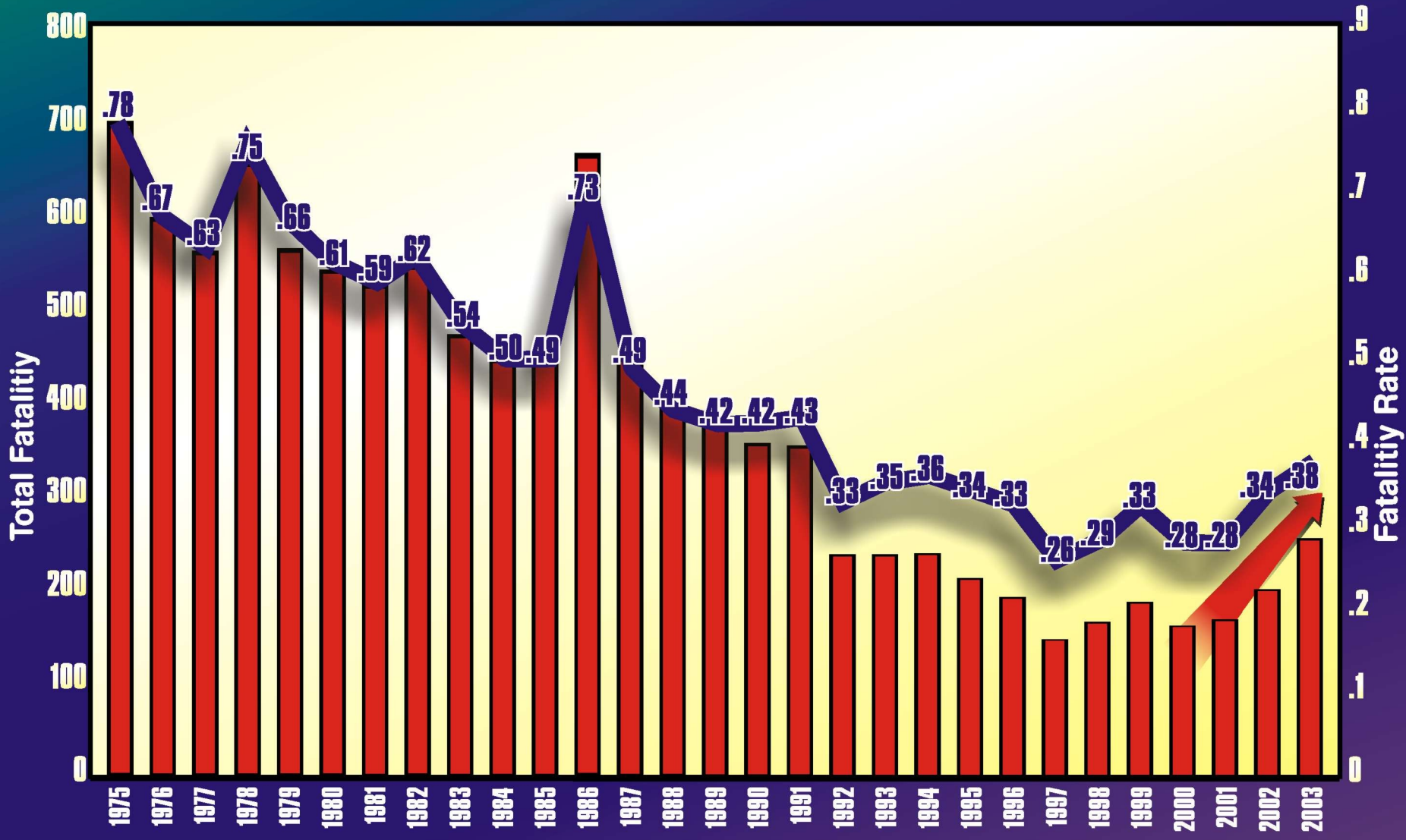
Spanish-American	15% / 85%
WWI	47% / 53%
WWII	43% / 56%
Korea	55% / 44%
Vietnam	45% / 54%
DS /DS	20% / 75%
OEF	48% / 51%
OIF	70% / 26%



Doing Better than Ever Before...But More Work to do!

BATTLE4-03

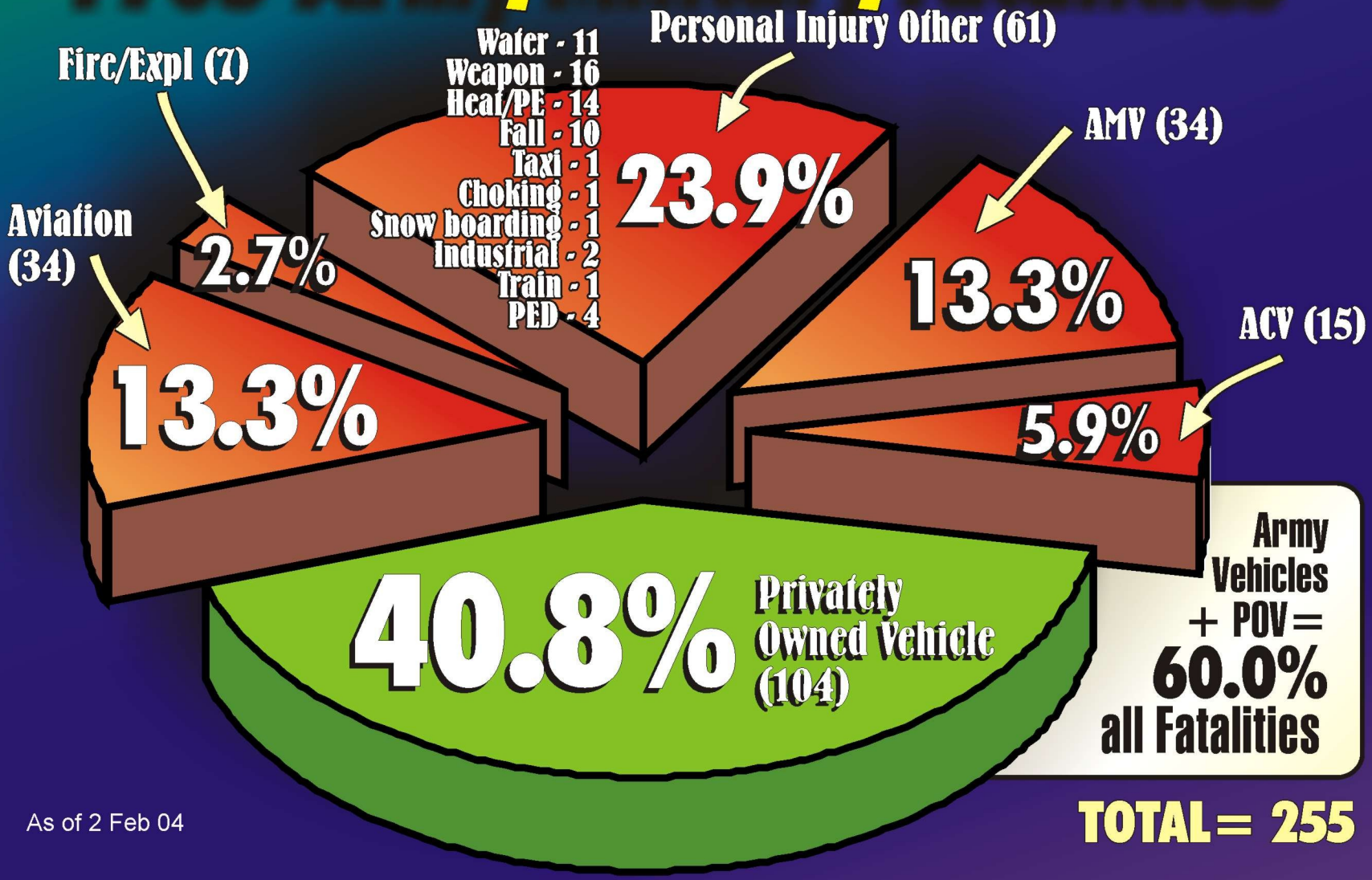
30 Year Historic Trend



ASP4-33B

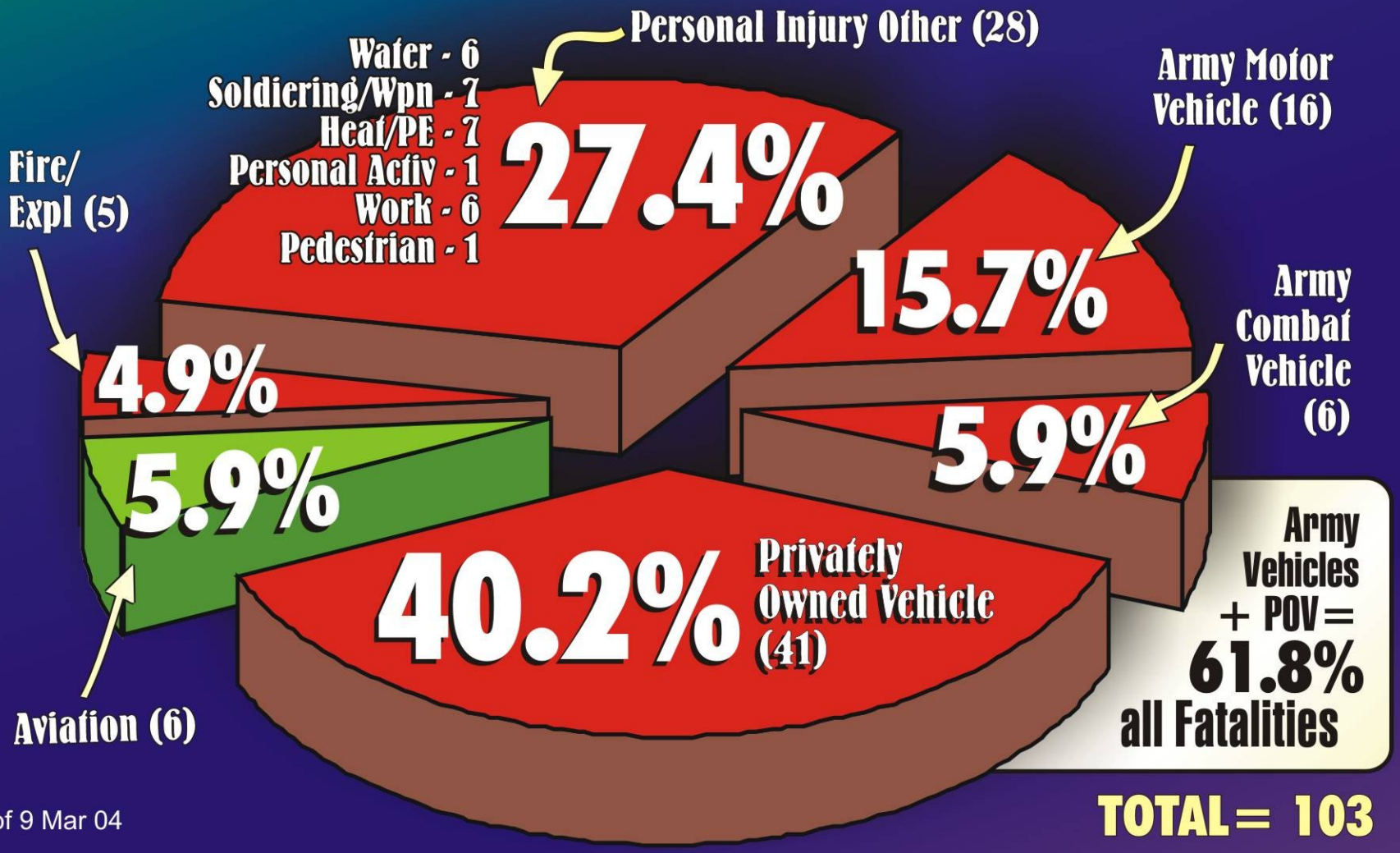
As of 2 Feb 04

FY03 Army Military Fatalities



Focus On the Main Effort and Cover the Flanks!

FY04 Army Military Fatalities



As of 9 Mar 04

Focus On the Main Effort and Cover the Flanks!

Total Army Versus OEF/OIF

(1 Oct 02 - 8 Mar 04)

Reported Army Accidents	Fatal*	Class A	Class B	Reported Class C	Reported Class D	Total
Aviation	40	43	31	100	66	240
Ground	318	351	120	1778	739	2988
Total	358	394	151	1878	805	3228
OEF/OIF Accidents						
Aviation	19	31	10	25	24	90
Ground	107	125	53	186	50	414
Total	126	156	63	211	74	504
OEF/OIF Percentages						
All Types	35.2	39.6	41.7	11.2	9.2	15.6

*Army Military Fatalities Only

CENTCOM has 34.2% of Army Personnel

Trends

Aviation

1. Environment ...Brownout
2. Aircrew Coordination
3. Single Ship OPS

Ground

1. Rollover
2. Speed
3. Failure to Follow Procedures
   - **Small Convoys**
   - **Seatbelts**
   - **Negligent Discharges**

POV

1. Fatigue
2. Speed
3. Failure to Follow Procedures
   - **Alcohol**
   - **Seatbelts**

Lessons From OIF

FY03 Class A Aviation Trends

Events *

Brown/white out..... 11 (39.3%)
Collision w/Ground..... 5 (17.9%)
Tree/Wire Strike..... 3 (10.7%)
Material failure..... 4 (14.3%)
IIMC..... 2 (7.1%)
Mesh Rotor Blades..... 1 (3.6%)
Mid Air Collision..... 1 (3.6%)
Collision w/Grnd object..... 1 (3.6%)

Causes */**

Individual failure..... 20 (90.9%)
- Crew coordination..... 12 (54.5%)
- Overconfidence..... 12 (54.5%)
- Indiscipline..... 4 (18.2%)

Environment..... 13 (59.1%)
Support failure..... 4 (18.2%)
Leader failure..... 8 (36.4%)
Training failure..... 4 (18.2%)
Risk Management..... 2 (9.1%)
Standards..... 3 (13.6%
Unknown..... 1 (4.5%)

Profile */**

Night..... 56.0%
IP..... 39.1%
Single ship..... 43.5%

IP (total/type)..... 2814/1466
PC (total/type)..... 1457/900
PI (total/type)..... 715/338

Type (YTD)

(ClassA/Fatal)	FY03	FY02
AH-64	9/3	8/4
MH/CH-47	5/0	5/8
OH-58D	3/0	5/2
MH/UH-60	11/28	5/2
Fixed-wing	1/2	1/1

As of 7 Jan 04

* Three Accidents still under investigation ** Non-material failures

FY04 Class A Aviation Trends OIF AOR

Events

Brownout..... 1 (9.1%)

Collision w/Ground..... 4 (36.4%)
Wire Strike.....2 (18.2%)
Material Failure..... 4 (36.4%)

Profile

Night.....7 (63.4%)
IP..... 0
Single ship.....9 (81.8%)

Type

(ClassA/Fatal)

AH-64.....3/0
OH-58D..... 7/6
MH/UH-60..... 1/0

All accidents still under investigation/exact causes TBD

As of 9 Mar 04

Ground Fatals

Type	Before 1 May 03	After 1 May 03
AMV/OAV	7	34
ACV	6	8
POV	1	1
FIRE/EXPL	3	7
PI/OTHER	6*	32**
TOTALS	23	82

* 4 neg discharge, 1 friendly fire, 1 comm carrier / transport
** 9 neg discharge , 2 friendly fire, 7 water, 7 PE , 3 tire expl , 1 fall, 1 Elec, 2 Marine Underway

As of 1 Mar 03

Army Motor Vehicle Accident Trends

Most accidents occurred in convoys in forward areas

Army Totals
- 196 injuries
- 49 deaths

OIF Totals
- 72 injuries
- 40 deaths

- **Speed was a factor in over 50% of the accidents studies**
- **Environment played a role in almost 50% of the accidents**
  - Dust
  - Civilian vehicles
  - Obstacles
- **Failure to use seat belts contributed to severity of injuries in almost 50% of HMMWV accidents**

AS of 29 Feb 04

Accidental Discharges in Operation Iraqi Freedom

- 10% of accidental fatalities during pre-hostilities phase
- 11.7% of accidental fatalities during hostilities phase
- 13.4% of accidental fatalities during post-hostilities phase

As of 1 Mar 04

NDS3-06B

Accidental Discharge Scenarios

- SM was fatally injured when his weapon discharged striking him in the head.
- SM was fatally injured when he fell off a ladder he was climbing causing his M4 rifle to accidentally discharge, striking him in the eye.
- M60D jammed in flight. Crew chief removed weapon from mount in attempt to clear the weapon, a round discharged through floor of UH-60 causing $39,500 in damage to aircraft. No injuries.
- SSG discharged M16 through roof of open sleeping bay. Unit had just returned from live fire training in Kabal. Weapon belonged to squad member and SSG thought weapon was unloaded.
- SPC on guard duty discharged 9mm while playing with weapon on guard duty. No injuries. Minor damage to guard shack. ROE only called for magazine in weapon with no round in chamber.

Accidental Discharge Scenarios

- After cleaning weapon, PVT places loaded magazine in 9mm and performs function check. As the slide came forward weapon discharged, hitting SPC in the back. MEDEVAC did not arrive soon enough and SPC died of wounds.
- MP discharged 3 rounds from M249 SAW while installing night vision sight. No injuries.
- SM retrieved what he thought was his unloaded 9mm from bag in tent. Weapon discharged severely injuring fellow soldier in abdomen.
- SM failed to properly clear weapon at clearing barrel discharging round.
- SM was performing function check after cleaning weapon. Round discharged into tent floor. No injuries.
- SGT was conducting class on how to perform function check on M4. He failed to remove magazine. Round discharged injuring his toe.

Army UXO & CEA/Fratricide Incidents

(12 Sep 01 to 10 Mar 04)

	TOTAL		UXO & CEA		FRATRICIDE	
	FATAL*	Class A	FATAL*	Class A	FATAL*	Class A
Army (Percent of Army Total)	570	623	8 (1.4%)	7 (1.1%)	10 (1.8%)	10 (1.6%)
OEF (Percent of OEF Total)	23	22	-	-	3 (13%)	1 (4.5%)
OIF (Percent of OIF Total)	118	145	8 (6.8%)	7 (4.8%)	7 (6%)	9 (6.2%)

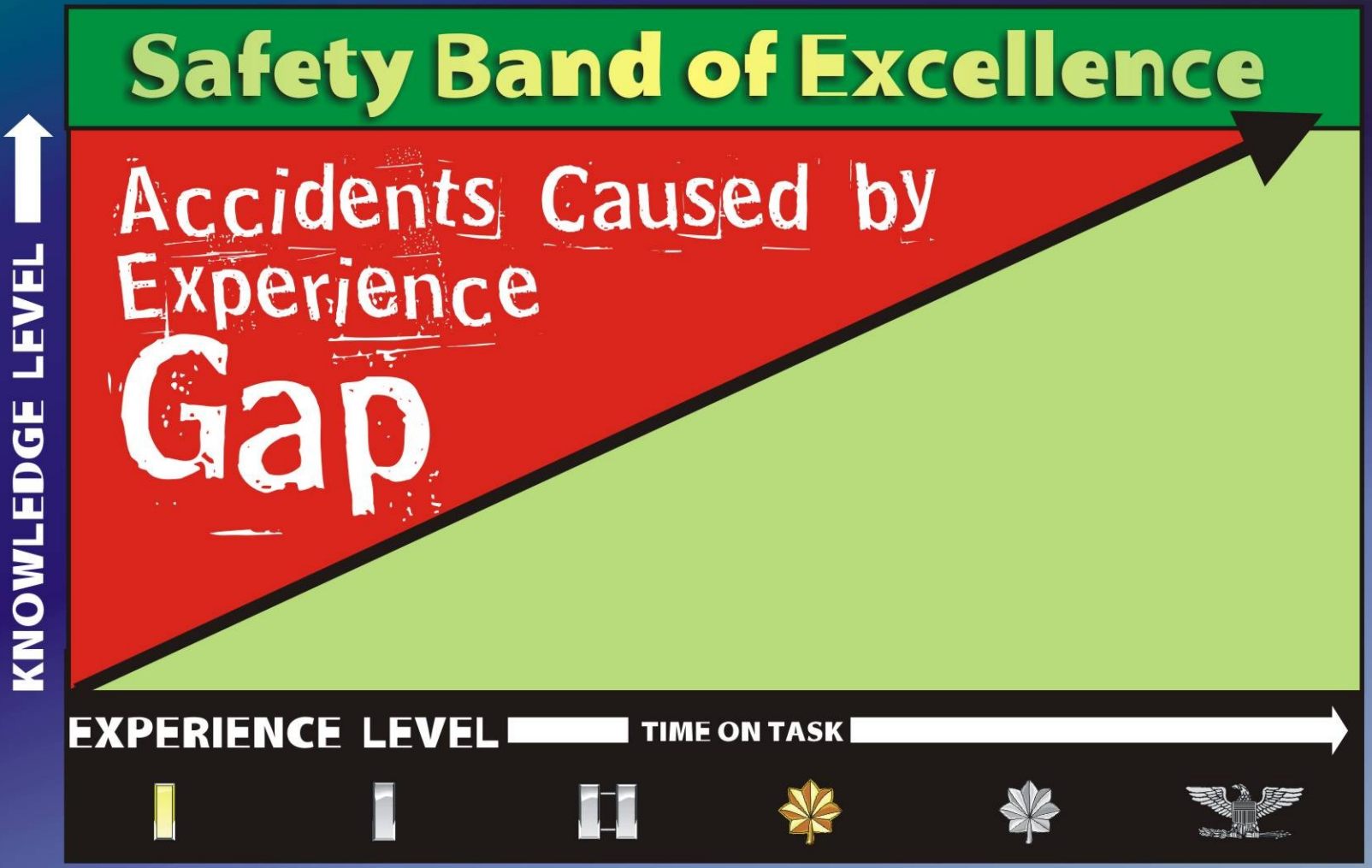
*Army Military Fatalities Only

POWELL4-03

Karkuk
As Sulaymaniyah
I R A Q
Euphrates River
Lake
Applying the
Lessons
Learned

"The Risk of Inexperience"

"Cody Model"



Risk Management "3 Deep"

Sergeant's Time Training

Requires Multi-Level Leader Involvement

Company Battle Drill

Like Intelligence Preparation of the Battlefield, Risk Management applied requires continuous & on-going

Commander's Risk Assessment

Units that participate in tough, well-disciplined operations with technically & tactically competent leaders present have significantly fewer accidents.

USASC

If you continue to do things the way you have always been doing them, you will continue to get the same result!

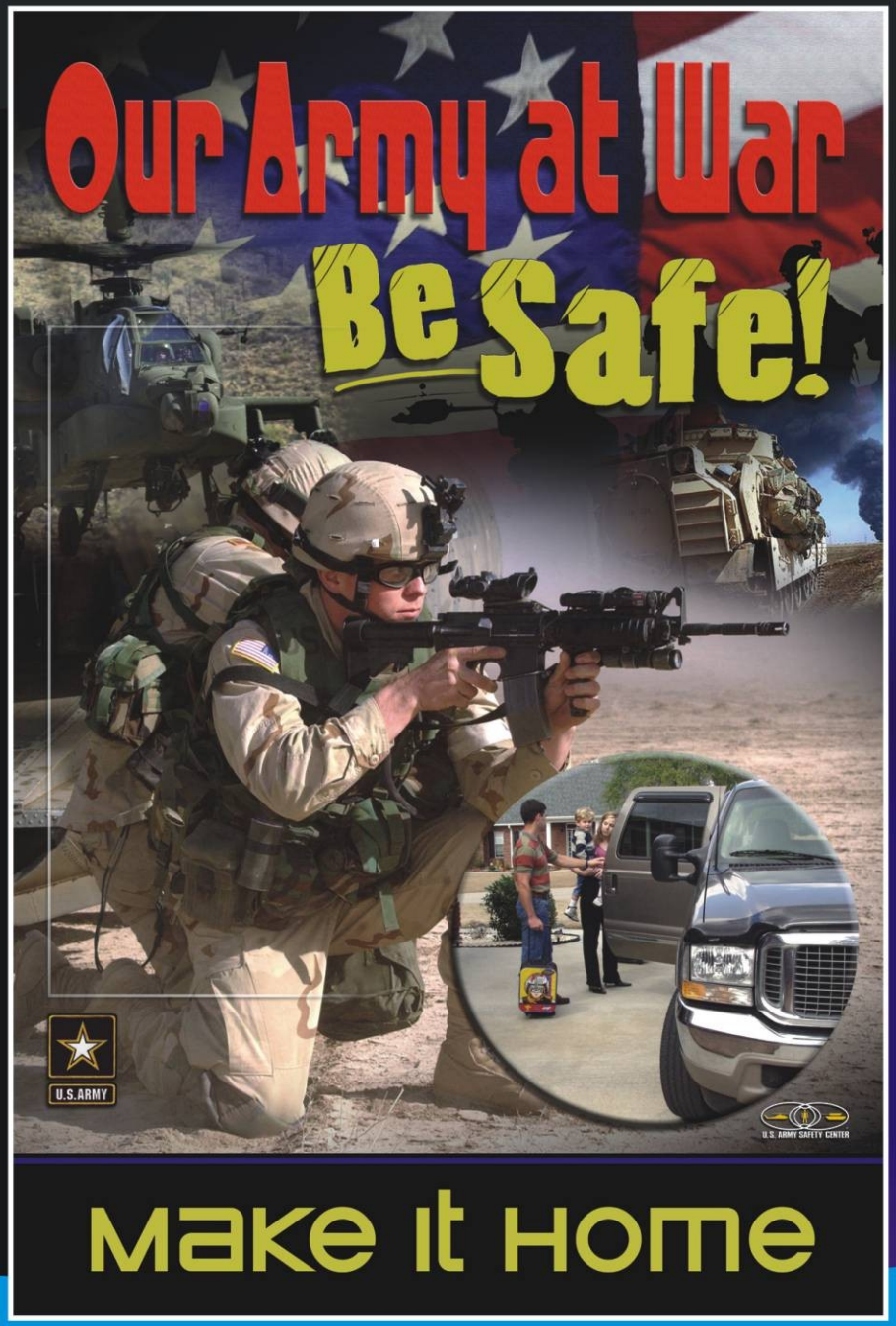
Dr. Scott Geller
Safety Behavioral Scientist

What
the Army
is doing
about it

Strategy

Soldiers, Make it Home!

Leaders, Bring 'em Home!



Army Safety Campaign *Plan*

ASP4-01

Tools to Bridge the Gap

ASMIS-1
WEB Based
POV - AIR - GROUND

Commander's Safety Course

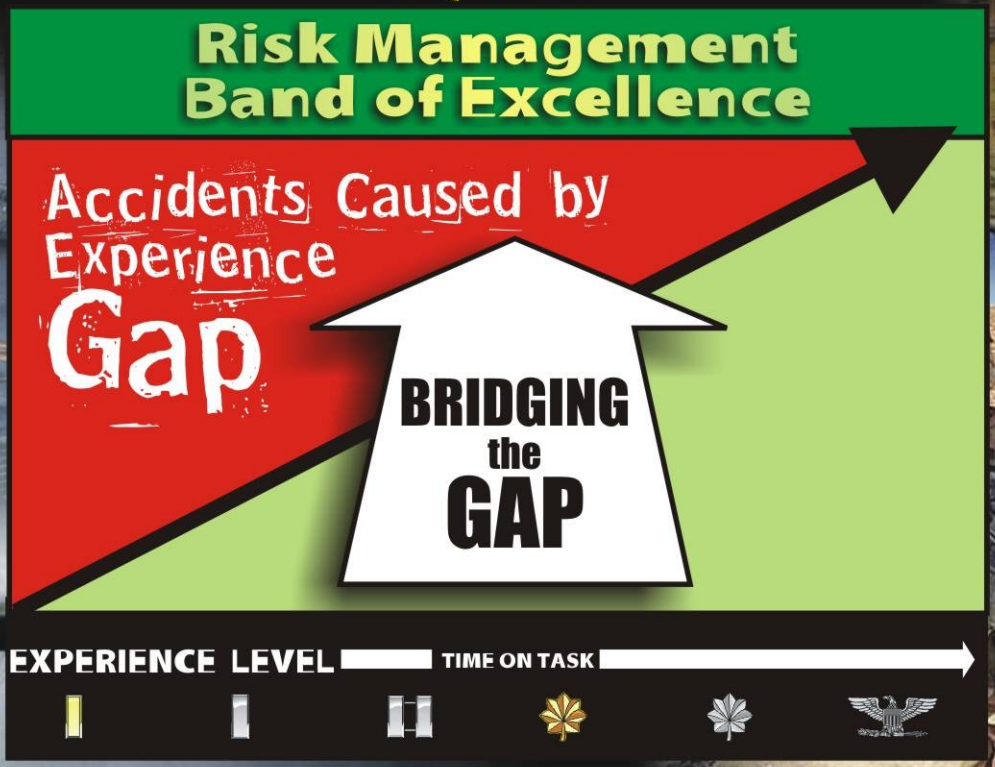
Commander Safety Brief

Lessons Learned
- RMIS
- Flightfax
- Countermeasure
- Listservers

Pockets of Excellence
Shares Best Practices

Deployment Videos
& PSAs

"Cody Model"



ASP4-36

Initiatives

- Commanders Safety Course
- Development of Common Core standards for weapons handling
- Development of Enhanced Aircrew Coordination Training (ACTE)
- Assessment of Driver's Training Programs
- Active capture & dissemination of Lessons Learned & "Army Best Practices"
- Commitment to Combat ID
- Forward deployed USASC teams

VEHICLE ACCIDENT SAFETY AWARENESS AND PREVENTION TRAINING

CPT XXXXXXXX

COMPANY COMMANDR XXXXX

PRIMARY TRAINER

References:

Safety Policy Letter, dtd 1 Jan 04

WHY DO WE NEED EMPHSIS ON VEHICLE ACCIDENT PREVENTION?

Since we deployed for Operation Iraqi Freedom:

- 45 Fatalities (as of 1 Jan 04)
- More than 170 Injuries
- More than 531 days in the hospital
- More than 1328 days of lost duty days

will not return to their Wives,
athers or Families.

WHAT HAS BEEN THE PRIMARY CAUSE OF OUR VEHICLE ACCIDENTS?

Excessive speed is the number one cause of our vehicle accidents

Poor road conditions and bad weather have also contributed to many of our vehicle accidents.

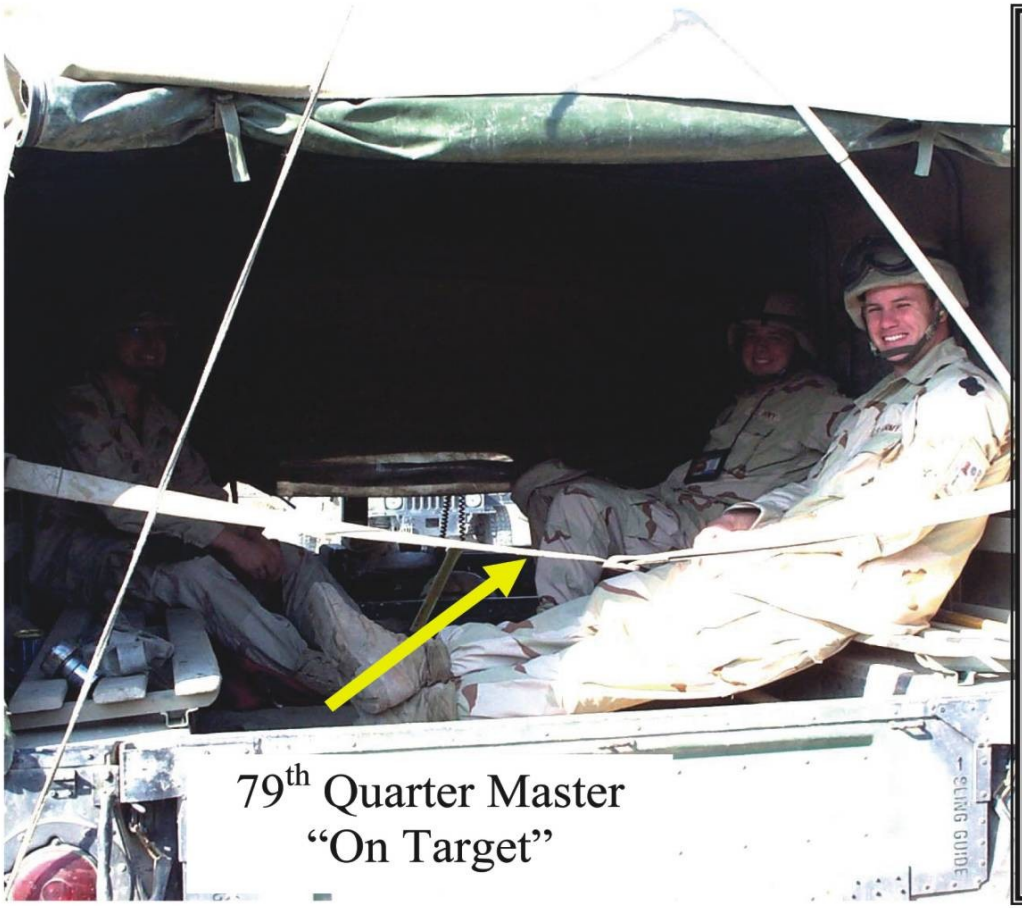
Add them together and -

excessive speed, poor road conditions, and bad weather create very dangerous and "Extremely High Risk" driving conditions.

POWELL4-09

"ANOTHER SAFETY HERO!"

4 January 2004



79th Quarter Master
"On Target"

Command Emphasis and Soldier Discipline evident in the 79th Quarter Master

Another on post run but…….

We observed this vehicle traveling on post. The Troop Strap is properly employed and all occupants of the vehicle are wearing their Kevlar, chin strap properly fastened.

The vehicle commander was a SSG who cared enough for his soldiers to enforce the standards.

Ruthless, caring enforcement of the standards, save our soldiers!

<u>Outstanding!</u>

POC: CJTF-7 Safety Office, DSN: 822-1429, DNVT: 550-2644

COMMANDERS ACTION CARD

24 November 03

AGENCY: CJTF-7 Safety Office
SUBJECT: Speeding HMMWV

PURPOSE: To inform CJTF-7 Commanders of the next possible accident in their unit.

INFORMATION: This HMMWV was observed speeding down the road and passing vehicles at speeds near 80 miles an hour. The location is a short stretch of hardball in a low threat secure area. No real tactical need for the speed.

INJURIES: Loss potential this vehicle, 4 soldiers

DAMAGE: Loss potential this incident, 1 HMMWV

Since Mar 03 we have lost 27 soldiers as a result of speeding, rollover, over controlling and or out of control vehicles. <u>All avoidable!</u>

Leaders must direct, enforce, re-enforce and follow up on standards. Employ sound risk management principles….. If you don't need to speed, then don't. Combat is not an excuse to disregard standards.

POC: CW4 "D" Smith, CJTF-7 Safety Office, DNVT: 550-2644

Our Army at War =

- Chain of Command & Leadership
- Standards & Discipline
- Enhanced Situational Awareness

Be SAFE!

Back-Ups

Lessons Learned OIF

Event	Before 19 Mar	19Mar–30Apr	1 May	Total
Hostile Fatalities	0	49 (74%)	266 (71%)	315 (70%)
Accidental Fatalities	10	17 (26%)	92 (24%)	119 (28%)
Non - Hos / Acc	0	0	17 (5%)	17 (4%)
Total Fatalities	10	66	375	451

Source: Army G-1 and RMIS

As of 29 Feb 04